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**Apiianga no te oraanga akapuapinga  
e te taporoporo i te ipukarea**

**Education as Sustainable Development: Mangaia,  
Cook Islands**

A dissertation presented in partial fulfilment of the requirements  
for the degree of  
Doctor of Philosophy in Development Studies

Massey University  
Palmerston North  
New Zealand.

Paul David Beumelburg

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## Abstract

Sustainable development (SD) and Education for Sustainable Development (ESD) became prominent in the 1990s. Problematically, these western centric constructs have sometimes been used to justify greater economic growth despite concern about the environment. Simultaneously, greater awareness of the pivotal role culture plays in development has demanded the rethinking of SD in terms of culturally responsive and contextually relevant ‘alternatives to’ development.

Using the case of Mangaia in the Cook Islands the aim of this research was to draw out Mangaian's own visions for SD and their consequent expectations for the type of ESD delivered to students in the classroom. Situating the research within a hopeful post-development framework a culturally responsive, open ended, critical research methodology was used to gain an understanding of what constitutes a Mangaian SD worldview. Using participatory semi structured interviews underpinned by Mangaian *uriuri manako* (reflective problem solving) preliminary frameworks for Mangaian SD and ESD were co-constructed.

This thesis highlights that to Mangaian people SD is complex and multi modal consisting of an indigenous development centred on *oraanga Mangaia* and alternative modernities, embedded in culture, operating at the margins of the global economy. This Mangaian view of SD, interacting with externally driven development, is continually reinvented by the Mangaian people using both indigenous and western knowledge, in response to issues of sustainability.

The study argues that current western centric ‘Education about’ and ‘Education for’ SD programmes do not reflect the cultural and contextual reality of SD in the Global South. Instead, Education as Sustainable Development (EasSD) is presented as a novel concept, which embraces learning taking place within culture and is able to respond to the context and dynamism of hopeful post-development settings: it is argued that this approach would provide students with the knowledge to be able to fashion community-based sustainable futures. An EasSD approach would expose students to a broader range of livelihoods options and have the ability to strengthen a student’s language, culture and identity while potentially improving their academic outcomes. A strength based implementation that draws on the support of all development and education stakeholders offers the best chance of actualising EasSD and so empowering students with the ability to participate in, and lead, their own communities’ SD.

## **Dedication**

This thesis is dedicated to my Mum and Dad.

June Stark French Beumelburg who sacrificed so many things for her children. You instilled in me my love of learning, academia and life. You sparked my interest in development studies.

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## List of Acronyms

AS - Achievement Standard

CBA - Cost Benefit Analysis

CITTI - Cook Islands Tertiary Training Institute

DESD - Decade of Education for Sustainable Development

EasSD - Education as Sustainable Development

EFA - Education for All

EfS - Education for Sustainability

EIA - Environmental Impact Assessment

EMP - Education Master Plan

ESD - Education for Sustainable Development

GDP - Gross Domestic Product

HRD - Department of Human Resources Development

IDG - International Development Group

IK - Indigenous Knowledge

IUCN - International Union for Conservation of Nature

JCfD - Joint Commitment for Development

MDGs - Millennium Development Goals

MFAT - New Zealand Ministry of Foreign Affairs and Trade

MIA - Mangaia Island Administration

MIRAB - Migration, Remittances, Aid and Bureaucracy

NCEA - National Certificate of Educational Achievement

NGO - Non Government Organisation



NSDP - National Sustainable Development Plan

NZC - New Zealand Curriculum

NZQA - New Zealand Qualifications Authority

NZQF - New Zealand Qualifications Framework

PACC - Pacific Adaptation to Climate Change

PEDF - Pacific Education Development Framework

PESDF - Pacific Education for Sustainable Development Framework

PICI - Pacific Islands Conservation Initiative

PRIDE - Pacific Regional Initiatives for the Delivery of Basic Education

RPEI - Rethinking Pacific Education Initiative

RPEIPP - Rethinking Pacific Education Initiative for and by Pacific Peoples

SD - Sustainable Development

SDGs - Sustainable Development Goals

SIDS - Small Island Developing States

SWAps - Sector Wide Approaches

TEK - Traditional Ecological Knowledge

UNCED - United Nations Conference on Environment and Development

UNESCO - United Nations Educational, Scientific and Cultural Organisation

USP - University of the South Pacific

SLEP - Sustainable Livelihood and Education in the Pacific

JBTE - Joint Board of Teacher Education

LLEE - Live and Learn Environmental Education

UCSIS - University Consortium of Small Island States

## Glossary of Mangaian terms

*Akapapaanga* – Genealogy

*Akaperepere* - To care for

*Akaputuputu taokotai* – Collaboration

*Akari* - Mature coconut

*Akarongo Kirititiano* – Christianity

*Akatamanako* – Thinking

*Akau* – Reef

*Akono* - Care for

*Akonoanga enua* - Using your skills and knowledge to utilise the resources from the land and sea to provide food and shelter

*Anua Enua* - The original name for Mangaia meaning a terraced or raised island

*Aarikianga* – Hospitality

*Aroa taeake kai* - The sharing of food amongst extended family members

*Aroa taeake* - The gifting and sharing of resources

*Aroaaroa* – Love and sharing

*Aronga Mana* - Mangaia's traditional leaders

*Avaiiki* - Mangaian Spiritual home also called Hawaiki

*Avarua* - The capital of the Cook Islands and central administrative centre located on Rarotonga.

*Ei* – Necklace

*Ei pupu* - Necklace made from shells of pupu (a small snail found in the makatea)

*Etene* - A non-Christian person

*Ika* – Fish

*Ivirua* - Village located on eastern side of the island

*Kainga* - A taro garden located inland. The garden can contain other crops as well.

*Kaikai* – Eating

*Kairanganuku* - Old name for ui rangatira (traditional leaders on Mangaia)

*Kakaro I te puaka I te puanio I te moa* - Tending pigs, goats and chickens

*Kauraro* – Respect

*Kavana* - A transliteration for governor used in reference to chief of a puna. Also known in olden times as a pava

*Keia* - One of the six puna on Mangaia

*Kete* – Basket

*Kimi i te oraanga meitaki/matutu/rangarangatu no te Mangaia whilst akono akaperepere ma te taporoporo i te ipukarea* - Mangaian SD

*Kimi ravenga* - Critical thinking (problem solving)\

*Kimi uga* - Hunting land crabs

*Kimi'anga Pu'apinga* - Enterprise studies

*Kimianga puapinga no te ipukarea* - Small business based on culture

*Kite peu karape* - Mangaian knowledge

*Kite peu karape ou* - New knowledge

*Ko'atu* – Stone

*Kopu tangata* - Extended family

*Maire* - The name of a plant used to make a popular leaf necklace

*Makatea* - The raised coral reef that encircles the island of Mangaia

*Mamio* – Taro

*Mango* – Shark

*Manioto* – Arrowroot

*Maroiroi* - physical and mental strength

*Maro-itiki* - Popular Mangaian design used in carving and tattoos representing a legend where two brothers who fought side by side

*Mātematika* – Mathematics

*Maunga* – Mountain

*Moa* – Chicken

*Ngakau akaaka* – Humility

*Noinoi apinga* – Greedy

*Nonu* - Fruit juice believed to have health properties

*Nui* - Drinking coconuts

*Nūmangātini* - The traditional name for the King or Queen of Mangaia

*Oneroa* - Village located on western side of the island. Administrative capital of the island.

*Ora'anga 'Iti-tangata* - Social Studies Curriculum

*Ora'anga ë te Tupu'anga Meitaki* - Health and Physical Well-being Curriculum

*Oraanga Mangaia* - Traditional life on Mangaia

*Pa enua* - Most commonly refers to any of the 14 outer islands of the Cook Islands excluding Rarotonga.

*Pakoti rouru* - Haircutting ceremony

*Parau* – Pearl

*Pare* – Hat

*Pana* – Clam

*Pava* - Traditional chief of a puna

*Peu angaanga* - Cultural activity

*Peu inangaro* - Cultural beliefs

*Peu oire tangata* - Cultural community

*Peu Ora'anga* - The Arts

*Peu puapinga* - Cultural values

*Peu ui tupuna* - cultural traditions

*Pitineti* – Business

*Puaka* – Pig

*Puanio* – Goat

*Puapinga pu* - Mangaian values

*Pui puaka* - Hunt pigs

*Puna* - District, one of six major wedge-shaped land divisions in Mangaia

*Purumu kikau* - Coconut brooms

*Rangarangatu* - Commanding respect and loyalty through knowledge and wisdom

*Rangatira* - Leader on Mangaia

*Rarotonga* - Main island of the Cook Islands consisting of capital and international airport.

*Rau* - Traditional adaptive management of land and sea resources

*Reo Mangaia* - Mangaian language

*Ropa* – Making

*Ropa kete* - Making a basket

*Ropa are* - Building houses

*Taieni* – Science

*Takoekoe* - Bamboo (often used to refer to a bamboo fishing rod)

*Takurua mataiti* - New Year's village feast

*Tamarua* - Southern village on Mangaia

*Tanga'eo* - Mangaian kingfisher

*Tanutanu* - Planting crops

*Tapere* - Sub-district, a lesser land division within a puna

*Taporoporo* – protect

*Ta'unga* - Knowledge person

*Te au peu enua* - Mangaian culture

*Te ipukarea ia rangarangatu* - Specific Mangaian customs connected to religion, culture, language, epistemologies, traditions, ways of living, reciprocal obligations, land tenure systems and relationship with nature.

*Te peu Maori* - Cook Islands culture

*Te reo Maori Kuki Airani* - Cook Islands Maori language

*Te Toki Purepure a Mangaia* - Mangaian adze

*Tekinoroti* – Technology

*Tiotio* - Small reef fish

*Tipene* - A type of flower

*Tiriara* - Largest lake on Mangaia

*Tiromi* - Smashed cooked taro

*Tivaevae* - Mangaian quilt

*To tatou ai tupuna* - Our ancestors

*Toitoi toki* - Carving adzes

*Tu inangaro* – Relationship

*Tuitui* – Sewing

*Tunumanga* – Cooking

*Uipaanga* – Meeting

*Ui paanga pukuru* - Traditional Mangaian New year's village meeting

*Ui rangatira* - Leaders (plural)

*Ungakoa* - Small crab

*Uriuri manako* - Problem solving often in a group

*Veitatei* - One of six puna on Mangaia

*Umukai* - Feast